IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A packer, comprising a sensor positioned therein.

2. (Currently amended) The packer of claim 1, wherein the sensor is a micro-electro-mechanical systems ~~MEMS~~ sensor.

3. (Original) The packer of claim 1, wherein the sensor is a nanotechnology-based sensor.

4. (Original) The packer of claim 1, wherein the sensor comprises a pressure gauge.

5. (Original) The packer of claim 1, wherein the sensor is adapted to measure a characteristic within the packer.

6. (Original) The packer of claim 5, wherein the characteristic is a pressure.

7. (Original) The packer of claim 1, further comprising:

a setting chamber; and

the sensor is adapted to measure a pressure within a setting chamber.

8. (Original) The packer of claim 7, further comprising a second sensor adapted to

measure a characteristic external to the packer.

9. (Original) The packer of claim 1, wherein the sensor is adapted to measure a characteristic external to the packer.

10. (Original) The packer of claim 9, wherein the sensor is adapted to measure a well annulus pressure.

11. (Original) The packer of claim 1, wherein the sensor is adapted to measure a tubing pressure.

12. (Currently amended) A completion, comprising:

a packer having a setting chamber supplied with hydraulic fluid from a remote source;

a pressure gauge adapted to measure a pressure within the setting chamber; and

a pressure sensor to measure a pressure of the hydraulic fluid, supplied by the remote source, at a location remote from the setting chamber, wherein the the pressure within the setting chamber is compared with the pressure at the location remote from the setting chamber to determine whether the hydraulic fluid is reaching the setting chamber.

13. (Original) The completion of claim 12, wherein the pressure gauge measures the direct pressure of the setting chamber.

14. (Original) The completion of claim 12, wherein the pressure gauge is directly

ported to the setting chamber.

15. (Original) The completion of claim 12, wherein the pressure gauge is positioned within the setting chamber.

16. (Original) The completion of claim 12, wherein the pressure gauge is positioned above the packer in a well.

17. (Original) The completion of claim 12, wherein the pressure gauge is adapted to measure a tubing pressure in an interior central passageway of the packer via the setting chamber.

18. (Currently amended) A completion, comprising:

a packer;

a gauge above the packer;

the gauge communicating with an interior cavity of the packer; and

a redundant gauge to verify measurements of the gauge by sensing the same well characteristic at a location spaced from a measurement location of the gauge.

19. (Original) The completion of claim 18, wherein the gauge is directly connected to the packer.

20. (Original) The completion of claim 18, wherein the gauge is positioned

within the interior cavity of the packer.

21. (Original) A method for use in a well, comprising directly measuring a pressure in a setting chamber of a downhole tool with a pressure gauge.

22. (Original) The method of claim 21, further comprising measuring a tubing pressure with the pressure gauge.

23. (Currently amended) A method for use in a well, comprising:

positioning a plurality of gauges within a packer;

measuring well characteristics at different positions within the well using the gauges; and

verifying at least one measured well characteristic by sensing the same measured well characteristic at a spaced measurement location.

24. (Original) The method of claim 23, further comprising measuring a tubing pressure with one of the gauges.

25. (Original) The method of claim 23, further comprising measuring an annulus pressure with one of the gauges.

26. (Original) The method of claim 23, further comprising measuring a setting chamber pressure within the packer with one of the gauges.